

With the state's population expected to grow to 60 million by 2050, California faces three choices regarding its transportation system: try to build more freeways and expand airports to meet the increased demands; do nothing; or develop a high-speed train system connecting our population centers, as many other countries around the world have done. At a total cost about half of what it would take to provide the same capacity on new freeways and at expanded airports, high-speed rail delivers many other significant economic, social and environmental benefits.

## **JOBS**

Construction of the initial Central Valley section is expected to generate 100,000 direct and indirect jobs over five years, an average of 20,000 jobs annually. Direct and indirect jobs to build all of Phase 1 are estimated at 1.2 million to 1.4 million over 20 years, an average of approximately 65,000 jobs annually. The Phase 1 system will generate 4,500 permanent operations and maintenance jobs.

An estimated 100,000 to 450,000 new statewide permanent jobs not related to HSR are expected by 2040.

# **IMPLEMENTATION**

The new business plan introduces a "building block" implementation approach to connect the state's major Northern California and Southern California population centers with high-speed trains. The project will be built incrementally as additional funding becomes available. Each step represents a critical decision point about whether to continue moving the project forward and each completed segment can be used on its own before a full statewide system is in place.

**Critical Decision Point One:** Construction of a 130-mile stretch in the Central Valley for about \$6 billion (year of expenditure) with a combination of federal and state funding that has already been identified. **2012** – **2017** 

**Critical Decision Point Two:** Extend the initial construction section to create an initial operating section (IOS) either from Merced to the San Fernando Valley or San Jose to Bakersfield. Once either of those sections is completed, true high-speed rail service will be provided to passengers for the first time in the U.S., projected ridership and revenue will be sufficient for the initial system to operate at break even or better, and private investment will initially materialize. Projected cost: IOS from Merced – San Fernando Valley: \$27.2 billion; or IOS from San Jose to Bakersfield: \$24.7 billion. **2015 – 2021** 

**Critical Decision Point Three, "Bay to Basin:"** Build the remaining initial operation section either to the north or south to provide a high-speed rail "Bay to Basin" system connecting the Bay Area and Los Angeles basin population centers and integrating with MetroLink in Southern California and Caltrain in the Bay Area. Projected cost: IOS from San Jose to Bakersfield: \$21.1 billion; or IOS from Merced-San Fernando Valley: \$24 billion. **2021 – 2026** 

**Critical Decision Point Four:** Additional rail-transit improvements in the Los Angeles basin and Bay Area, including electrification of existing rail systems, to create "blended" operations with high-speed rail to provide a "one-seat" ride from San Francisco to Los Angeles and Anaheim. Projected cost: \$23.9 billion. **2026 – 2030** 

**Critical Decision Point Five:** Start to construct Phase 2 extensions toward Sacramento and San Diego, or continue to complete the full Phase 1 high-speed rail system between downtown San Francisco and Anaheim through Los Angeles. Projected cost for full Phase 1: \$19.9 billion: **2026 – 2033+** 

### REALISTIC COST ASSUMPTIONS

Cost estimates are based on a set of realistic assumptions to provide an honest and credible assessment of resources required to develop the HSR system. These include:

- Nine-year construction-schedule cushion to account for potential delays and funding availability
- Annual inflation of 3 percent
- \$16 billion in contingencies for material-cost increases, use of different components or parts, and minor quantities changes.

#### **FUNDING**

In addition to state bond revenues, funding required to build the high-speed rail system will primarily be provided from the federal government and private investors. Local support also remains an element of the overall funding plan.

Funds necessary to begin the Initial Construction Segment have been identified. This includes \$3.3 billion in federal funding and \$2.7 billion in state bond funding. New funding will be identified before additional construction begins, ensuring that the program will go forward in a fiscally responsible manner. The plan assumes no additional federal funding before 2014.

Once passenger service is provided on an initial operating section, ridership and revenue will facilitate private capital to supplement public investments for future construction.

The Authority also is partnering with cities and transportation agencies to find early investment opportunities in the south and north, such as grade separations or double tracking, which could potentially allow for early development of "higher speed" rail in existing rail corridors and prepare those corridors for eventual, true high-speed train service.

If resources become available earlier, construction timelines can be accelerated.

## **RIDERSHIP**

Ridership estimates and models used to develop them were peer reviewed and approved by international expert peer-review group. Projections are based on average HSR fares that are 83 percent of current airfares and reflect conservative assumptions on fuel prices (\$3.80 per gallon), population growth and pace of travel growth. No operating subsidy will be required under any ridership scenarios.

#### Projected annual ridership in 2040:

IOS South: 9.5 million – 14.0 million IOS North: 7.6 million – 11.2 million Bay to Basin: 16.1 million – 23.7 million Phase 1: 29.6 million – 43.9 million

### ANNUAL ENVIRONMENTAL AND SOCIAL BENEFITS

- 8 billion fewer vehicle miles traveled
- 146 million hours saved
- CO<sub>2</sub> emissions reduced by 3 million tons



